

Harper County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Harper County economy.¹

These 19 sectors have a total direct output of approximately **\$173.3 million** and support **647 jobs** in Harper County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Harper County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	647.0	15.93%	\$33,559,821	13.20%	\$173,298,735	68.14%
Indirect Effect	212.8	5.24%	\$14,062,849	5.53%	\$27,321,641	10.74%
Induced Effect	43.7	1.08%	\$2,928,962	1.15%	\$5,251,559	2.06%
Total Effect	903.5	22.24%	\$50,551,631	19.88%	\$205,871,934	80.95%

As shown in the above table, agriculture, food, and food processing sectors support **904 jobs**, or **22.24%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$205.9 million**, **roughly 80.95% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately **\$50.6 million**, or **19.88% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **19.88% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **374 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Harper County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	374.2	\$54,626,246
Grain farming	86.3	\$38,808,236
Farm machinery and equipment manufacturing	52.9	\$24,880,973
Animal, except poultry, slaughtering	52.8	\$37,260,140
Support activities for agriculture and forestry	44.5	\$2,117,304
Truck transportation	39.6	\$6,723,315
Wholesale trade	35.8	\$7,050,053
Animal production, except cattle and poultry and eggs	22.7	\$3,337,203
All other crop farming	16.5	\$1,524,910
Dairy cattle and milk production	13.2	\$5,521,445

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$54.6 million** to the Harper County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	374.2	\$54,626,246
Grain farming	86.3	\$38,808,236
Animal, except poultry, slaughtering	52.8	\$37,260,140
Farm machinery and equipment manufacturing	52.9	\$24,880,973
Wholesale trade	35.8	\$7,050,053
Truck transportation	39.6	\$6,723,315
Dairy cattle and milk production	13.2	\$5,521,445
Oilseed farming	3.2	\$4,067,741
Animal production, except cattle and poultry and eggs	22.7	\$3,337,203
Support activities for agriculture and forestry	44.5	\$2,117,304

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Harper County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	3.2	\$4,067,740.98
Grain farming	86.3	\$38,808,235.81
Vegetable and melon farming	0.1	\$18,251.50
Fruit farming	0.2	\$14,638.44
Tree nut farming	0.2	\$43,719.47
Greenhouse, nursery, and floriculture production	10.3	\$1,419,853.00
Cotton farming	2.5	\$665,009.63
All other crop farming	16.5	\$1,524,909.88
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	374.2	\$54,626,246.12
Dairy cattle and milk production	13.2	\$5,521,444.58
Poultry and egg production	0.2	\$213,302.10
Animal production, except cattle and poultry and eggs	22.7	\$3,337,202.94
Commercial logging	0.8	\$35,868.14
Commercial hunting and trapping	1.6	\$32,960.65
Animal, except poultry, slaughtering	52.8	\$37,260,140.13
Bread and bakery product, except frozen, manufacturing	3.5	\$461,818.10
Frozen cakes and other pastries manufacturing	0.2	\$32,266.82
Farm machinery and equipment manufacturing	52.9	\$24,880,973.27
Veterinary services	5.5	\$334,153.52

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Harper County, the retail sector was omitted.